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(818) 884-8211

June 22, 1988

Precision Tank Test Inc.
3960 Laurel Canyon Boulevard, Suite 422
Studio City, California 91604

Subject: Geotechnical Report, Subsurface Tank Site, at 2623 Gardenia Avenue, Signal Hill

Gentlemen:

This report has been prepared at your request and in accordance with the requirements of the Waste Management Division, Los Angeles County Public Works, for the removal of an underground storage tank. The general subsurface conditions in the area adjacent to the tank site were determined.

A 10,500 gallon tank that was used to store crude oil and water was removed. The resulting circular excavation is about 9± feet deep. It was apparent that the soils at the base of the excavation were contaminated with hydrocarbons. A backhoe trench was excavated at the base of the original excavation to a depth of 15 feet. This provided access to the soils beneath the elevation of the bottom of the tank.

Four soil samples were collected with hand-driven, 2.5 inch-diameter brass tubes which were capped and placed on ice for transportation to Global Geochemistry Corporation for chemical analysis. The samples were analyzed for total hydrocarbons by E.P.A. 418.1 analytical method. The results of the analyses and a chain of custody record are included as Tables 1 and 2. The

attached plot plan depicts the general site conditions (Figure 1).

SITE CONDITIONS

The property includes a series of oil storage tanks owned by Pen Transportation Inc. The northernmost tank in a north-south trending row of tanks was removed. A concrete loading ramp is present to the northwest of the tank site. A small shack that serves as an office is directly north of the excavation.

SUBSURFACE CONDITIONS

The excavation at the tank site exposed Pleistocene marine deposits composed of loose to poorly cemented sands. These sands ranged in color from reddish brown and greenish gray to light gray. No groundwater was encountered in the excavation to a depth of 15.5 feet.

LOG OF TANK EXCAVATION

0.0 - 9.' Marine deposits: sand, slightly silty, excavation partially filled with soil from caving around perimeter, reddish brown, black seams of oil contamination within soil, hydrocarbon odor, some of soil is greenish gray, hydrocarbon odor, loose, damp

9.' - 11' Marine deposits, sand, greenish gray, poorly cemented, damp, hydrocarbon odor

11' - 13' Marine deposits: sand, reddish brown, loose

13' - 15.5' Marine deposits; sand, poorly indurated, tan to gray.

Soil samples at 10' (sidewall), 12.5' (sidewall), 14.5' (sidewall), and 15.5' (bottom)

CONCLUSIONS AND RECOMMENDATIONS

1. The 10,500 gallon tank was uncovered and placed at another location on the property. The tank is no longer serviceable.

2. The chemical analysis of the soil indicated a relatively high concentration of petroleum hydrocarbons of 945 ug/g of dry soil at a depth of 10 feet or 1 - 2 feet below the base of the tank.

3. The chemical analysis of the soil indicated a very rapid decrease in total hydrocarbon content to a low level of 27 ug/g of dry soil at a depth of 12.5 feet.

4. Further over-excavation of the pit to a uniform vertical depth of 16 feet and some additional lateral over-excavation of the sidewalls could remove the majority of the contaminated soil at this location.

5. All contaminated soil should be collected and transported to an approved hazardous waste disposal facility.

6. Additional soil samples should be collected and analyzed after the over-excavation to confirm that sufficient lateral and vertical removal has been done.

Respectfully submitted,

Alexander R. Ball

Alexander R. Ball
R.G. 68, C.E.G. 43

TABLE 1

GLOBAL
*GEO*CHEMISTRY
CORPORATION

TELEX: 194449 LSA ATTN: GGC

6919 ETON AVENUE • CANOGA PARK • CALIFORNIA 91303-2194 (818) 992-4103

Client: Precision Tank

WO#:4024
project: Pen Transportation
Gardenia st.
Date:06-17-88

ANALYSIS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL SAMPLES

1. Sample Background.

Four soil samples were collected by Precision Tank on 06-15-88, received by Global Geochemistry on 06-15-88, and analyzed on 06-16-88. Samples were stored at 4 ^{o}C prior to analysis.

2. Summary of Analytical Procedures.

Soil samples were analyzed for total petroleum hydrocarbons by EPA 418.1 analytical method.

3. Results:

EPA 418.1

GGC#	Sample I.D.	Sample Wt. (gm)	Moisture Content (%)	Total Petroleum Hydrocarbons (ug/g dry soil)
Method Blank		-	-	nd
3902	1-14.5'	27.2	10.7	22.5
3903	2-12.5'	27.6	9.6	27.1
3904	3-10.0'	22.5	7.5	945.3
3905	4-15.5'	24.0	8.1	19.7
Detection Limit:				5.0

Analyst Ru-Po Lee Supervisor

TABLE 2

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
	PRECISION TANK

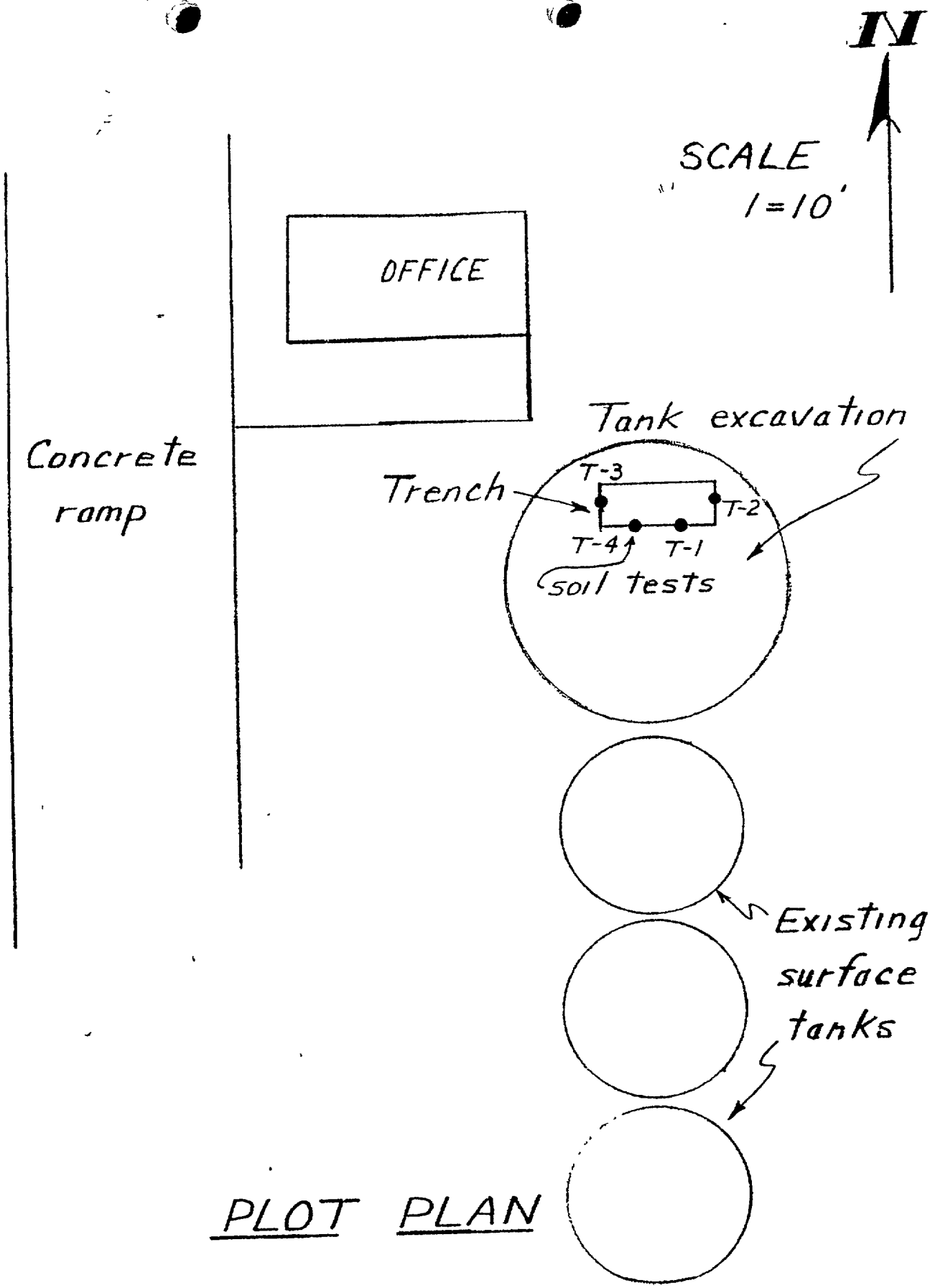
SAMPLERS: (Signature)

PEN TRANSPORTATION - GARDENIA ST

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	418.1	REMARKS
3902 PIT (1)	6/15	2:55			14.5'		✓	
3903 " (2)	"	"			12.5'		✓	
3904 " (3)	"	"			10.0'		✓	
Clean 3905 " (4)	"	"			15.5'		✓	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Ball	6/15 WED 2:55 PM	Ru-Po Lee			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files


N
SCALE
1=10'
OFFICE
Concrete
ramp
Tank excavation
Trench
T-3
T-2
T-4
T-1
soil tests
Existing
surface
tanks

PLOT PLAN